

FIGURE 1

PRIOR ART

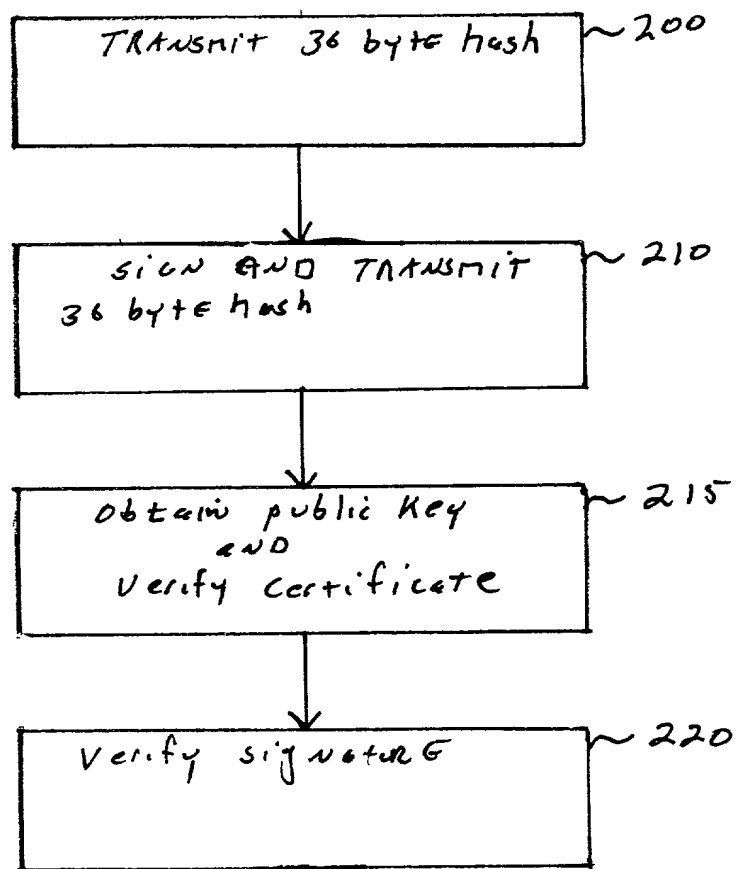


FIGURE 2
PRIOR ART

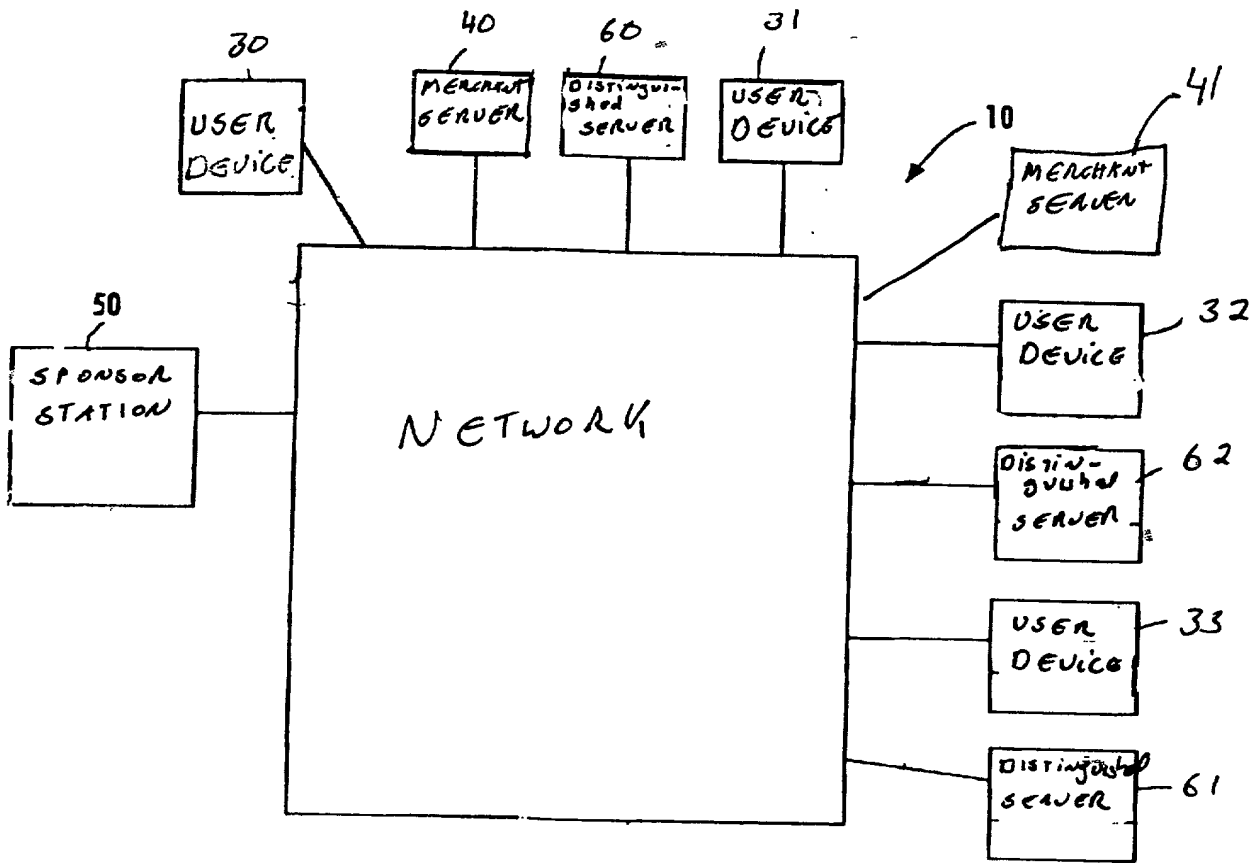


Figure 3

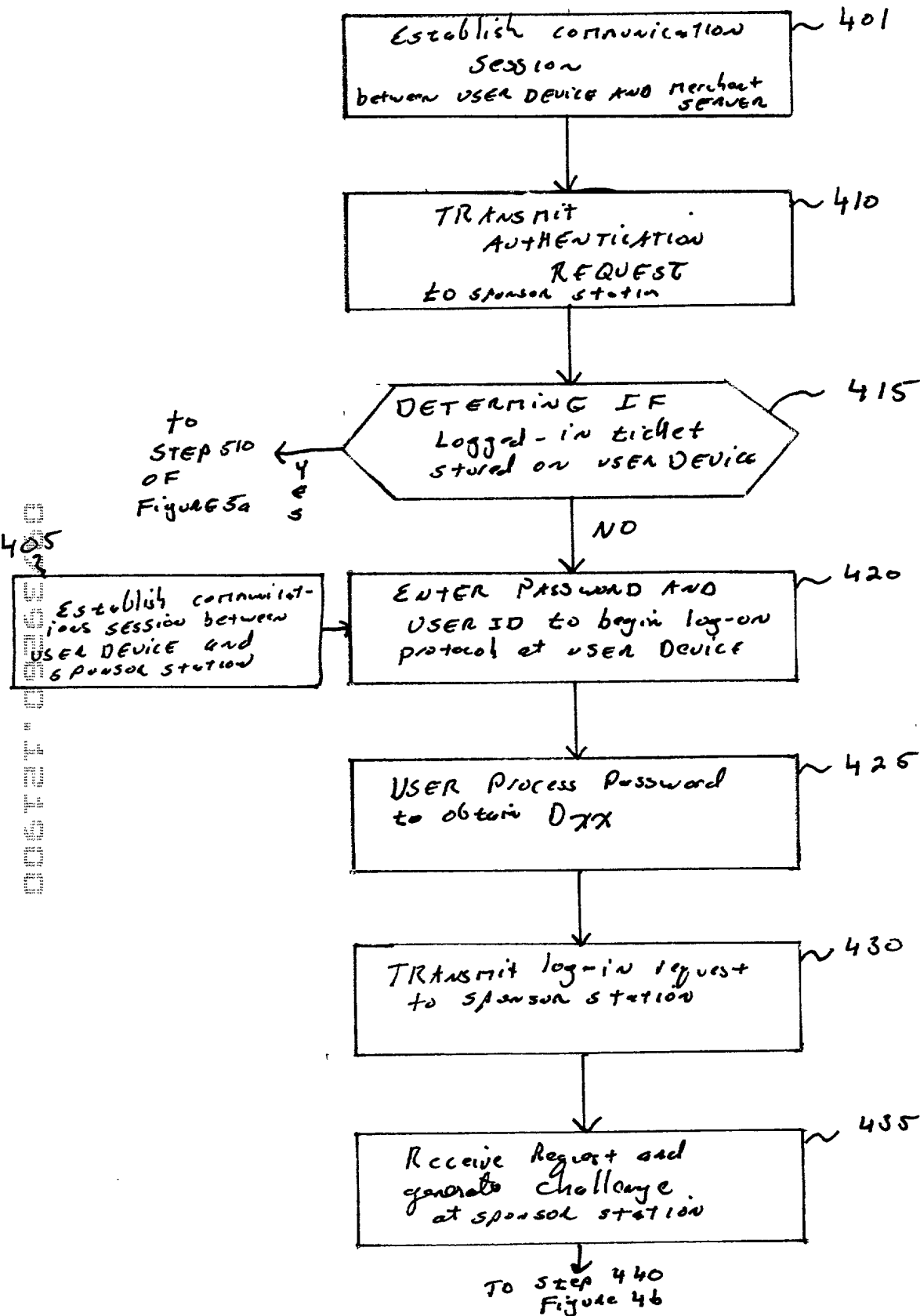


FIGURE 4a

From STEP 435, FIGURE 4A

TRANSMIT CHALLENGE
to USER DEVICE ~ 440

Receive Challenge, generate
R1 and Time stamp at
USER DEVICE ~ 445

Form First Encrypted
Message with
Dxx at USER DEVICE ~ 450

TRANSMIT FIRST
ENCRYPTED MESSAGE
to SPONSOR STATION ~ 451

Decrypt First encrypted
MESSAGE with Dxs
at SPONSOR STATION ~ 455

to STEP
420, FIGURE 4A

TRANSMIT NOTICE
to REENTER
PASSWORD and
USER ID to USER
DEVICE ~ 460

generate R2, compute $R1 \text{ XOR } R2$,
generate timestamp, determine
a lifetime-value at sponsor
station ~ 465

Encrypt R2, timestamp, and
Lifetime-value with R1
forming second encrypted message
at sponsor station ~ 470

to STEP 471,
FIGURE 4C

FIGURE 4B

From step 470, Figure 4b

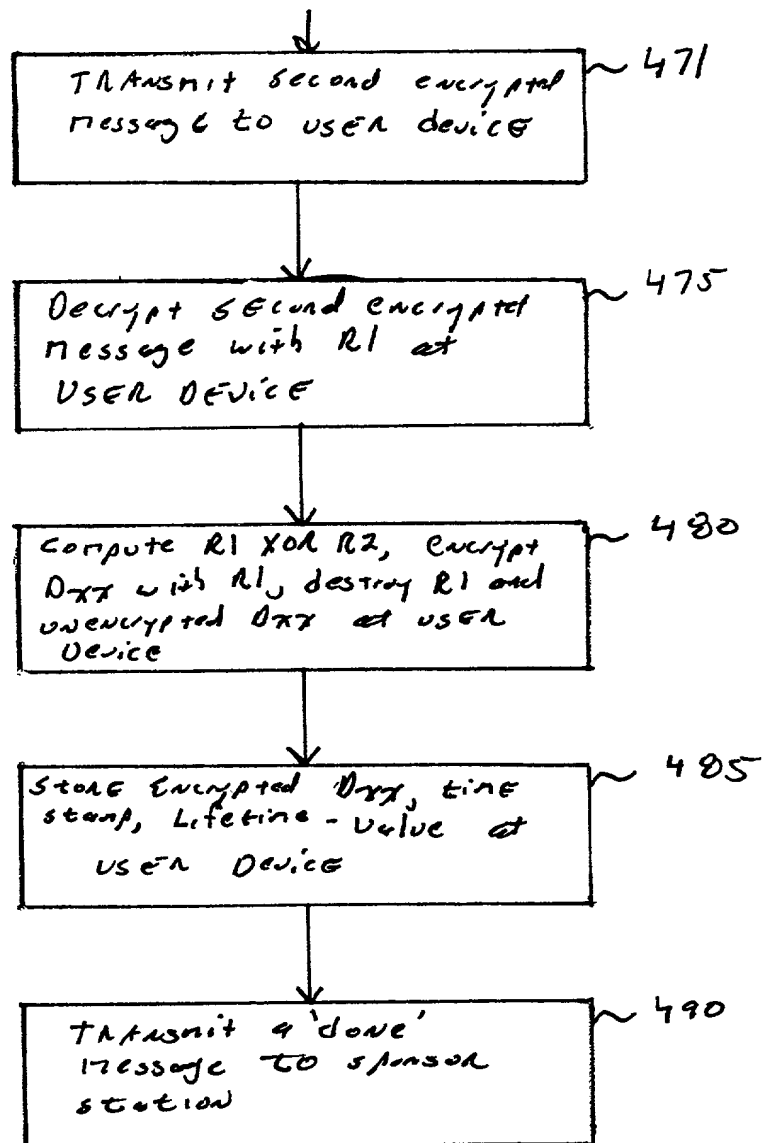


FIGURE 4C

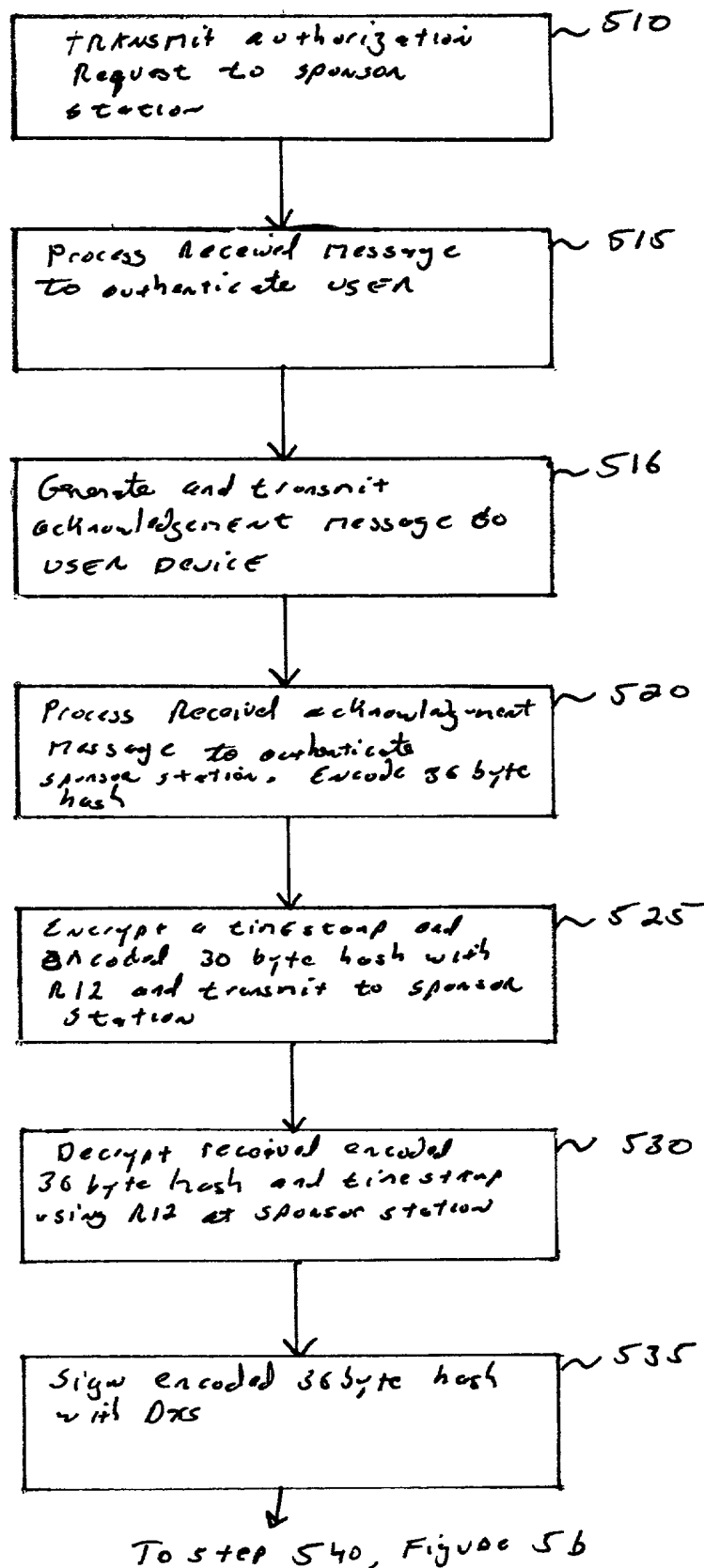


FIGURE 5a

From step 535, Figure 5a

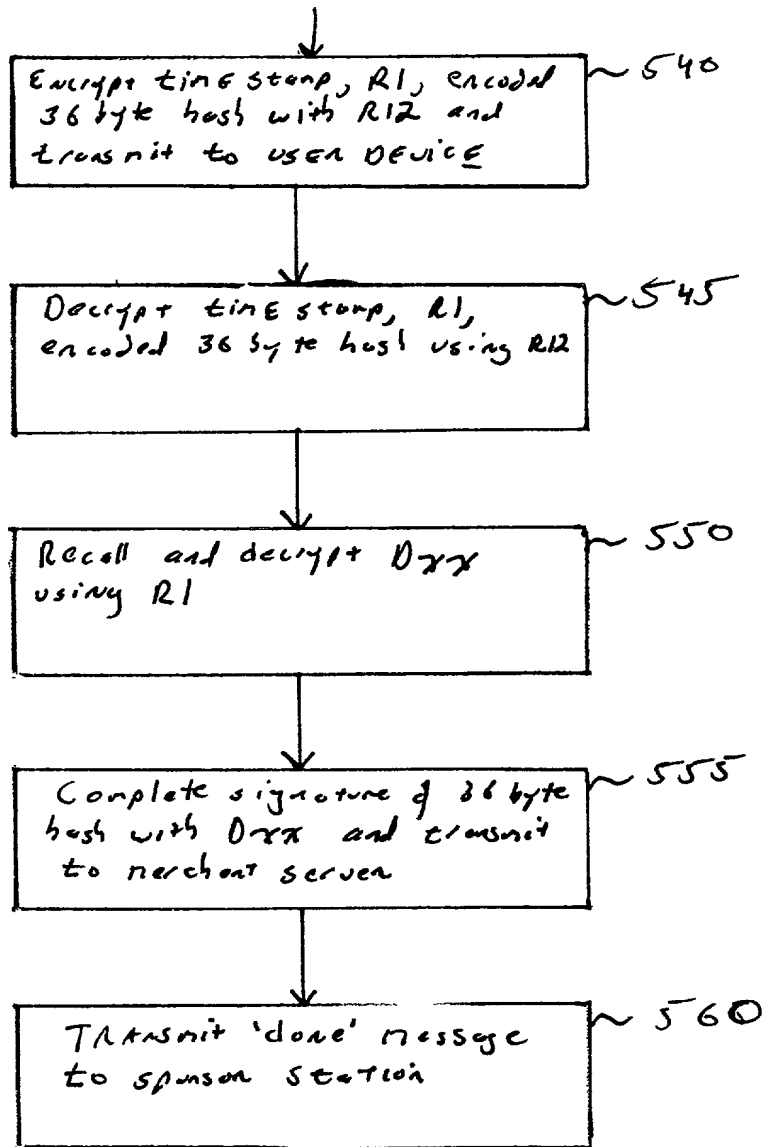
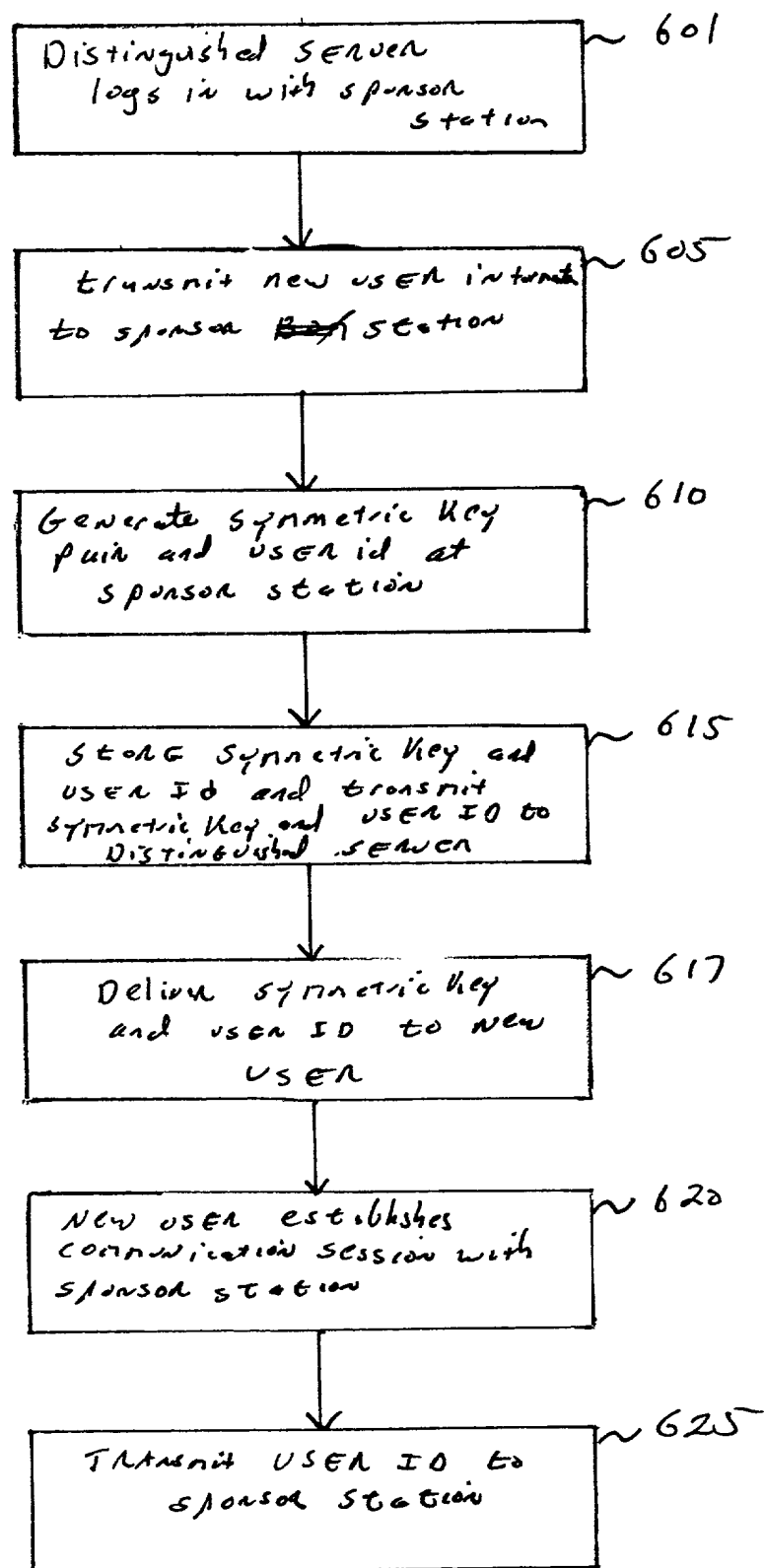


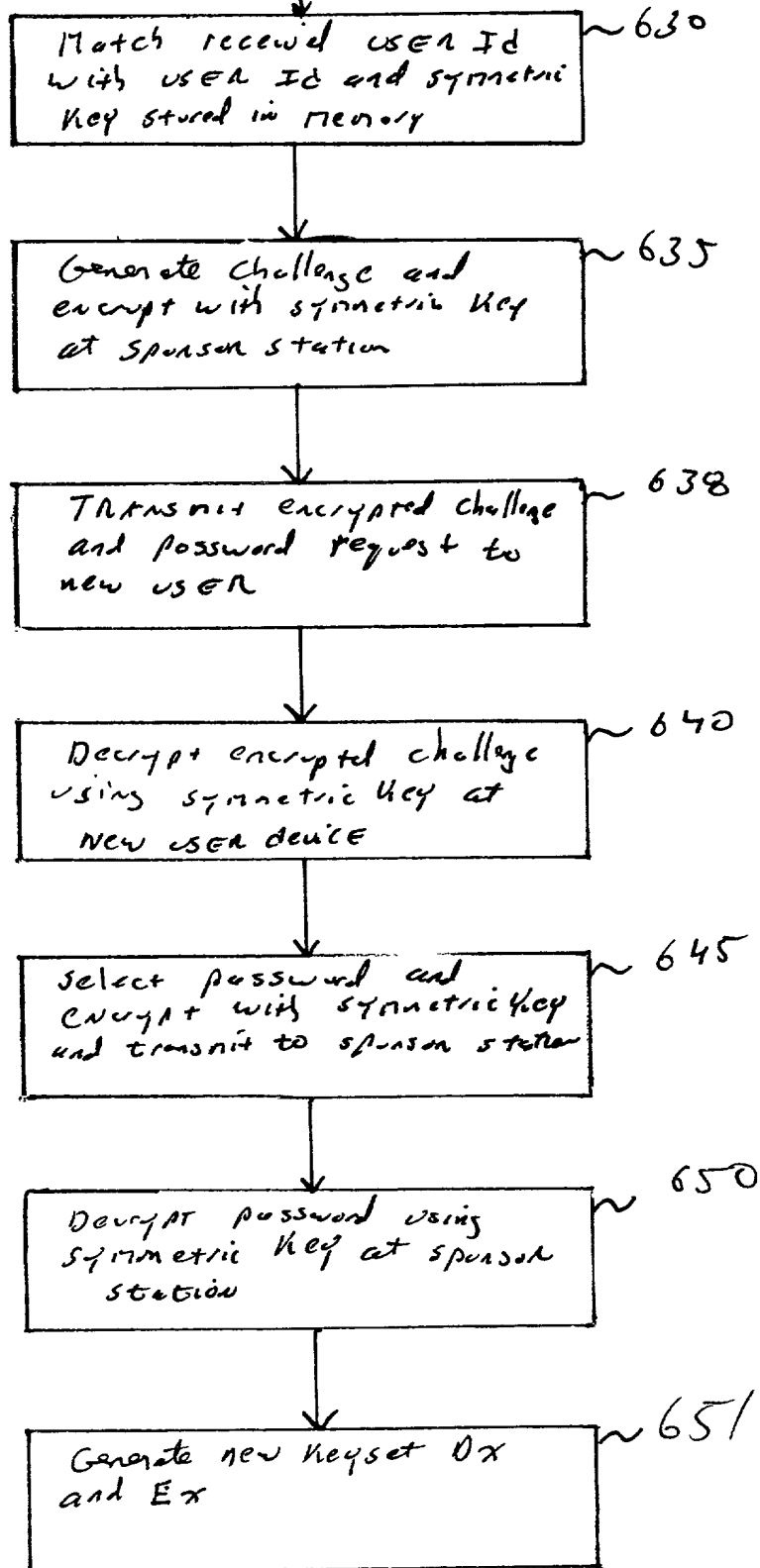
Figure 5b



To step 630, Figure 6b

FIGURE 6a

FROM STEP 625, Figure 6a



to step 655, Figure 6c

Figure 6b

From step 651, Figure 6b

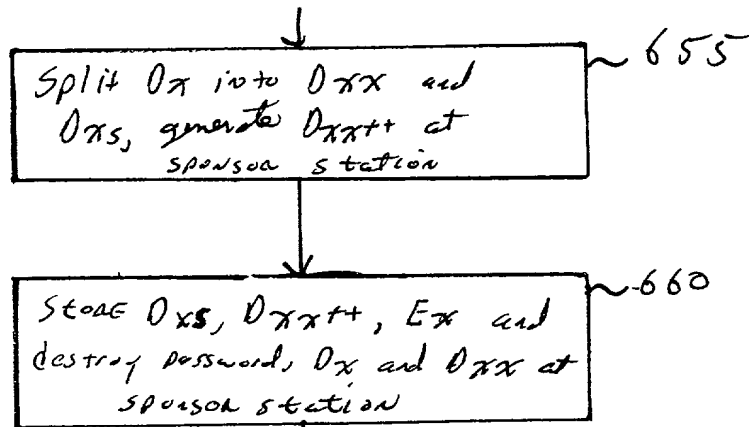


Figure 6c

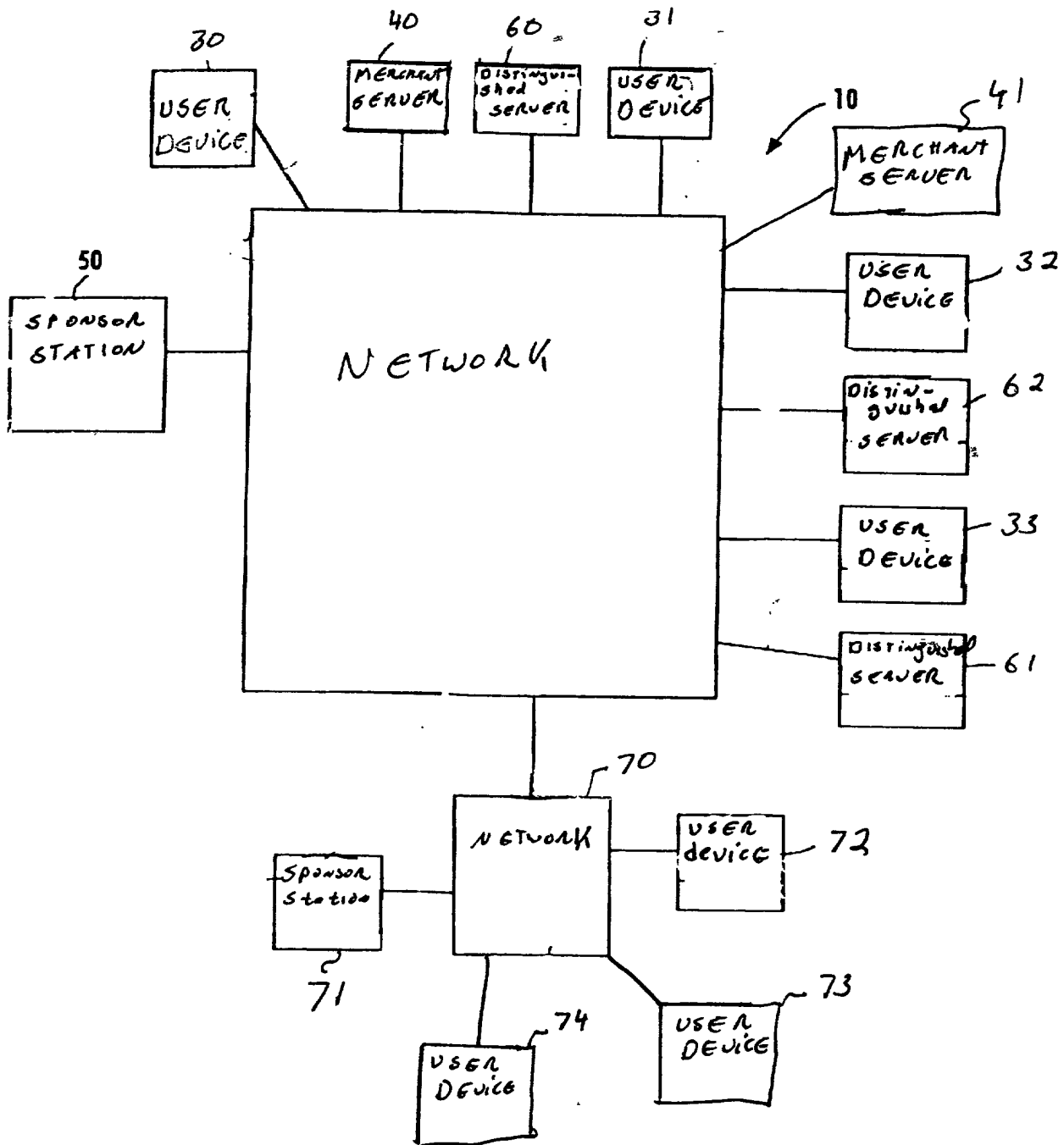


FIGURE 7

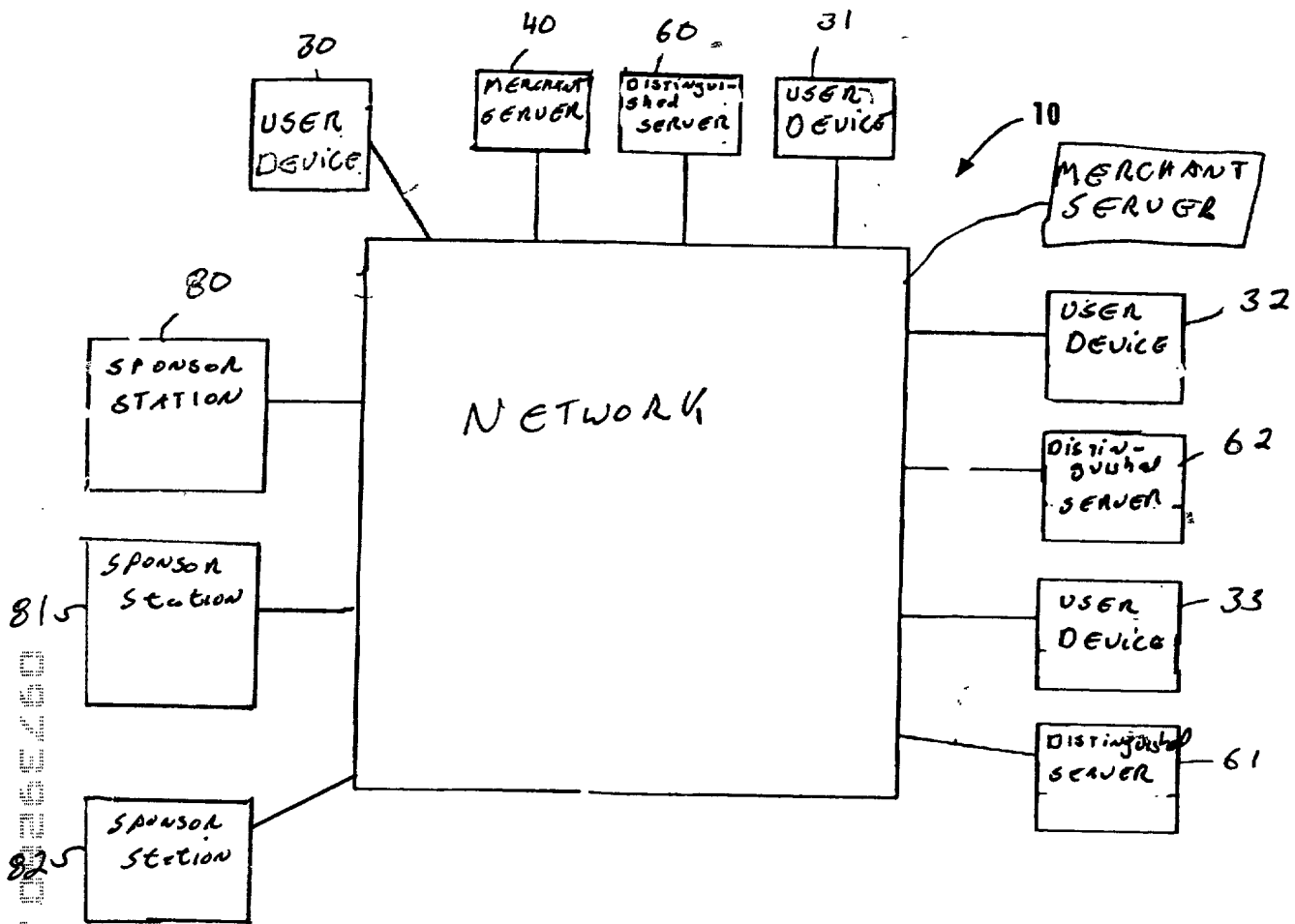


Figure 8

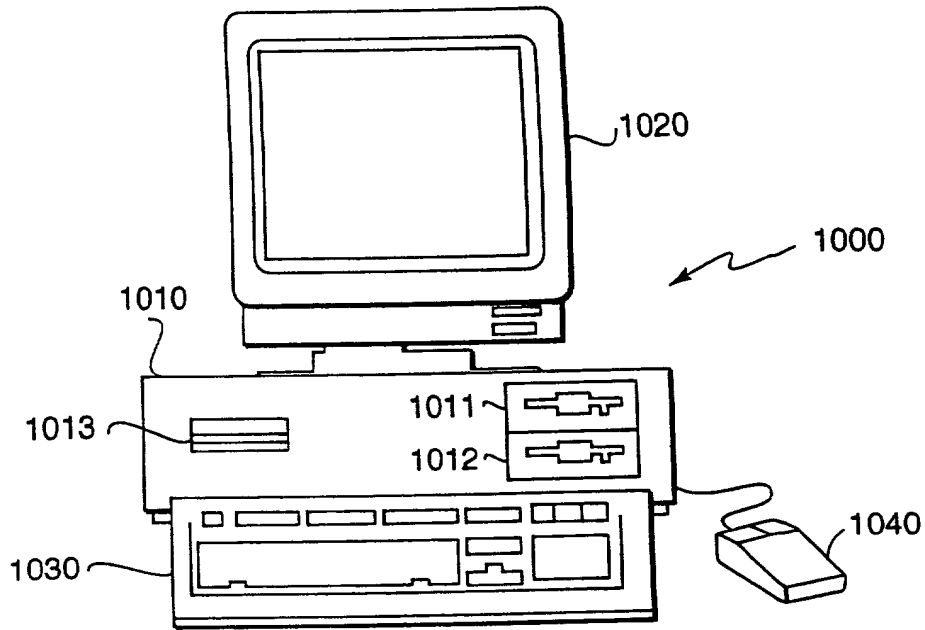


FIG. 9

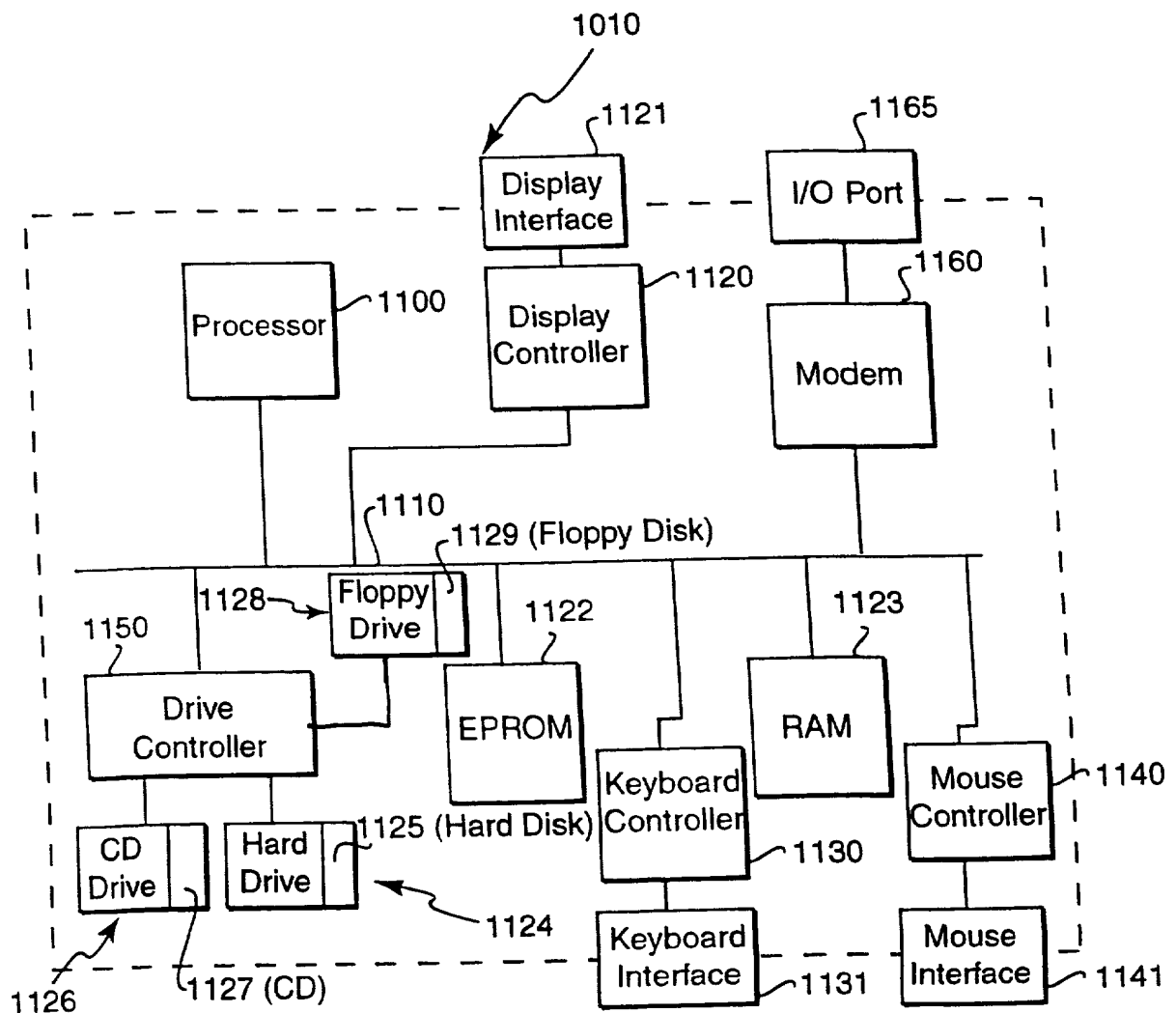


FIGURE 10

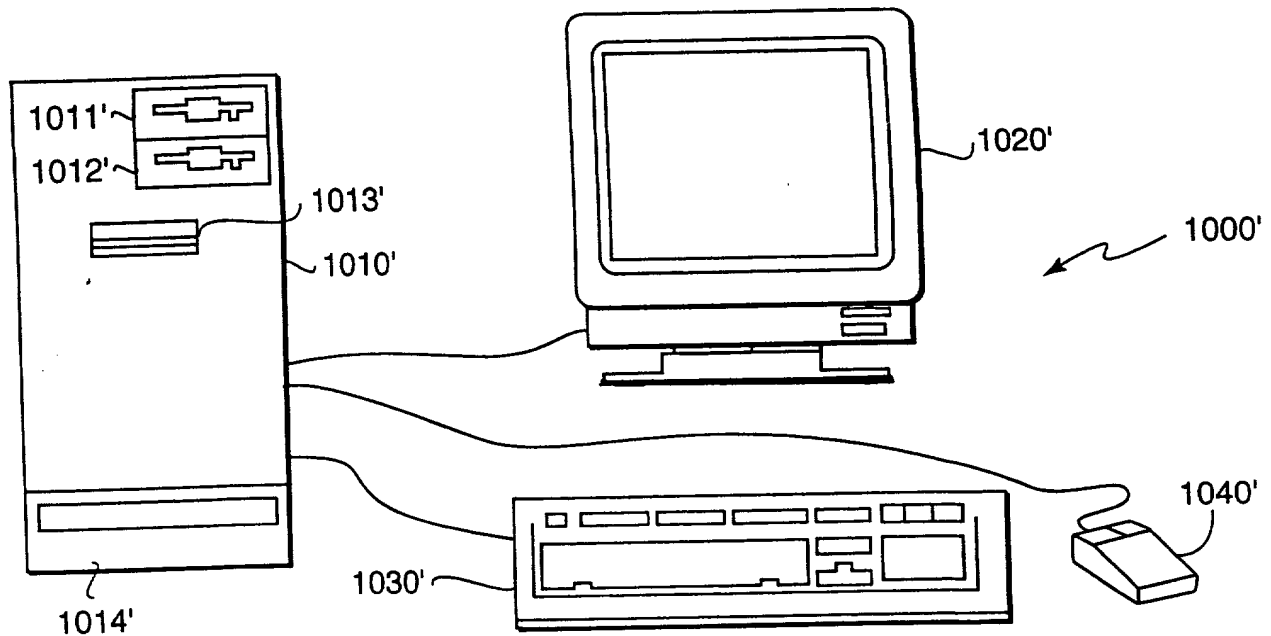


FIG. 11A

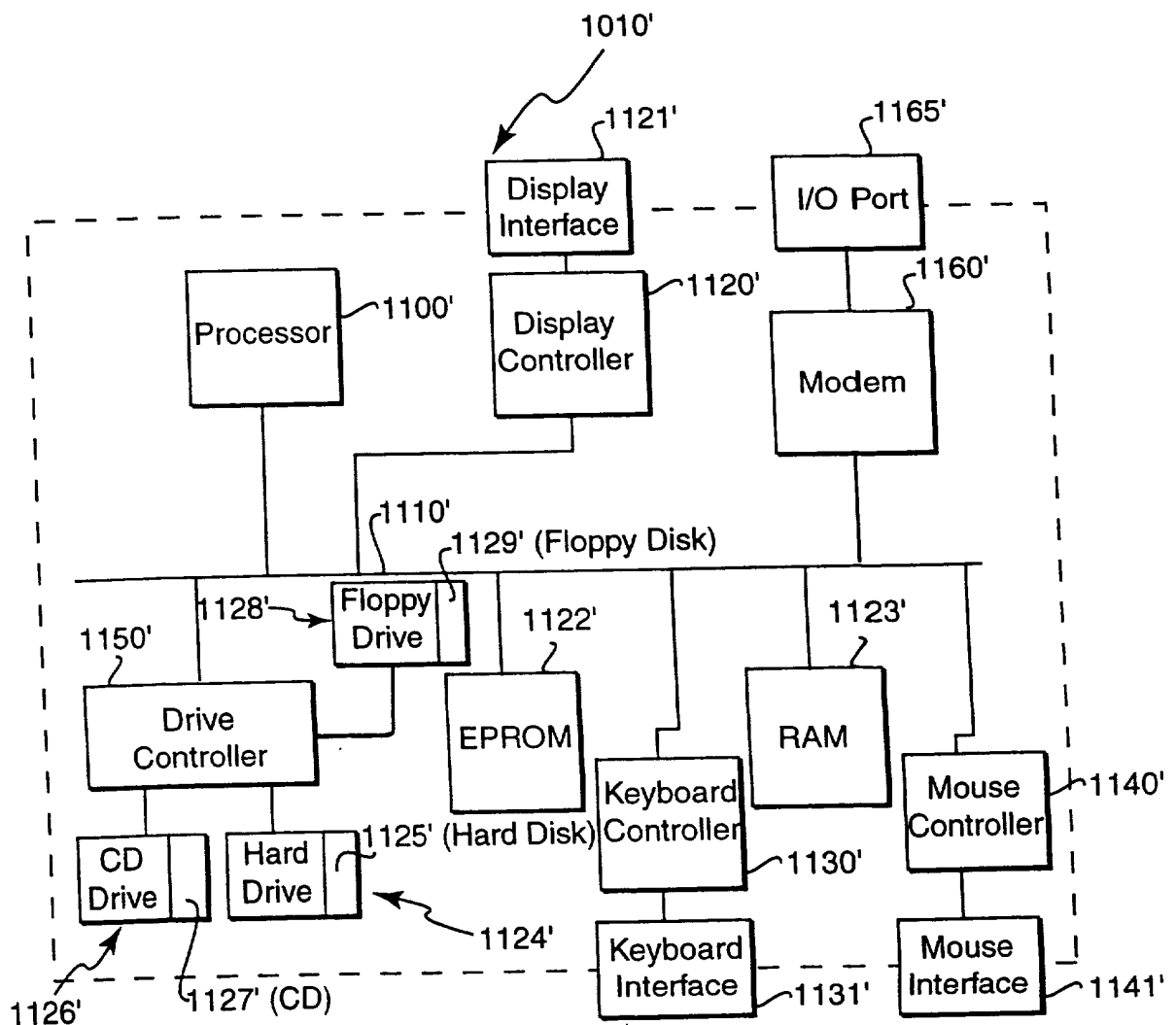


FIGURE 11B